BEFORE THE POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

ITT RAYONIER, INC., (Grays Harbor Division), Appellant, v. STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY, Respondent.	)	PCHB No. 91-215 FINAL FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

This matter came on for hearing before the Pollution Control Hearings Board, William A. Harrison, Administrative Appeals Judge, presiding, and Board Members Harold S. Zimmerman, Chairman, Annette S. McGee, and Judith A. Bendor.

The matter is the appeal of combined civil penalties totaling $100,000 for alleged violation of technology based effluent limitations.

Appearances were as follows:

1. Molly B. Burke, Attorney at Law, for ITT Rayonier, Inc.

2. Rebecca A. Vandergriff, Assistant Attorney General, for Department of Ecology.

The hearing was conducted at Lacey, Washington, March 18 and 19, 1992.

Gene Barker and Associates provided court reporting services.

Witnesses were sworn and testified. Exhibits were examined. From testimony heard and exhibits examined, the Pollution Control Hearings Board makes these

FINDINGS OF FACT

I

This matter arises at the Grays Harbor pulp mill of respondent, ITT Rayonier, Inc., located at Hoquiam, Washington. It concerns the events of December, 1990, and January, 1991.

II

It is customary for the ITT Hoquiam Mill to close during the week of Christmas. December of 1990, however, was particularly cold in Hoquiam. Temperatures for the month were 5.5 degrees below normal. From December 19-24, 1990, the temperature was below freezing.

III

A cold period of the type experienced in December, 1990, combined with a mill closure could have led to the wide spread freezing of the mill's lines and consequent high potential for breakage and environmental, as well as economic, harm. For this reason, the Christmas shutdown of 1990 was cancelled by ITT. The entire context of this case lies against the background of ITT having made the correct decision to operate its mill, and thereby reduce the risk of environmental harm from what it otherwise might have been.

IV

The ITT mill remained in operation and was staffed throughout December, 1990, despite a strike commencing the previous August. The mill was operated by salaried personnel working 12 hour shifts including staffing from other divisions.

V

In order to keep the mill running it was necessary to obtain a resupply of 50% sodium hydroxide solution, or caustic, which is used in pulp making. On Saturday, December 22, 1990, a barge arrived at the ITT mill from Canada carrying 1100 metric tons of caustic.

VI

On Sunday, December 23, 1990, the mill's supply of caustic in its land based storage tanks had dwindled to 200 metric tons, or two days supply. The decision was made by ITT to unload the barge promptly so as to replenish its supply of caustic before the amount in storage ran out. The unloading of the barge was also imperative because the barge was unheated. The freezing point of caustic is 59 degrees farenheit. Thus, the caustic loaded hot onto the barge was in a cooling process that could result in crystalization. Crystalization of the caustic would have rendered it useless. At 6:00 p.m. on Sunday, December 23, 1990, unloading of the barge began.

VII

In charge of the barge unloading for ITT was Mr. Richard Shen, a process engineer. Assisting him was Mr. Mark White, also a process engineer. Both are trained in chemical engineering. Mr. Shen had been responsible for chemical unloading at the mill during the four month strike period. He had unloaded numerous chemicals and specifically had unloaded the caustic barge on two prior occasions.

VIII

Mr. Shen and Mr. White knew the capacity of ITT's three land-based caustic storage tanks to be 1500 metric tons.[1] They knew that the 1500 ton capacity, less 200 tons then in

[1] There are three separate tanks, tank no 1 at 900 metric tons, and smaller tanks no. 2 and no. 3 at 300 metric tons each

storage, left 1300 tons capacity remaining. They reasonably concluded that this was more than enough to accommodate the 1100 tons of caustic to be unloaded from the barge. There never was a risk of exceeding the capacity of the three caustic storage tanks.

IX

The caustic storage tanks were at all times steam heated. Thus, the risk of crystalization of the caustic, once in the tanks, was reasonably foreseen by Shen and White to be nil, despite the outdoor temperatures which ran to the twenties and low teens.

X

Of particular interest to Mr. Shen was the unheated connecting line which ran beneath the dock from the barge to tank no. 1. He reasonably monitored that connecting line. He then assumed that if the caustic (still at 90 degrees farenheit on the unheated barge) could pass through that vulnerable unheated connecting line he was "home free" once the caustic entered the heated tanks. The tanks are so arranged that a short "transfer pipe" 2-3 feet in length connects no. 1 to no. 2 and no. 2 to no. 3 near the top of each tank. Thus, when no. 1 fills, the pumping pushes the caustic to no. 2 which fills, and then on to no. 3. As previously noted, the system had capacity, in all three tanks, to hold the entire contents of the barge.

XI

Having begun the barge unloading at 6:00 p.m. on Sunday, December 23, 1990, Messrs. Shen and White followed a written unloading procedure devised by ITT in 1988 and used since then. At 10:30 p.m. on Sunday, December 23, 1990, Mr. Shen went home. Tank no. 1 had begun filling by that time.

XII

The written unloading procedure (Exhibit A-9 on this record) provides at step 35:

Monitor unloading lines and tank levels during pumping.

Much of the monitoring was reasonably directed toward the line connecting the barge with tank no. 1 because of its vulnerability to freezing. In addition, Mr. White made the rounds that cold night and inspected, three times, the level indicator gauges on each tank. Those gauges measure the pounds per square inch of pressure in the caustic storage tanks and thus the level of caustic. Mr. White found these gauges to be frozen. Consequently, he went to a nearby building and brought hot water to pour on the gauges. This unfroze the gauges for Mr. White to observe.

XIII

The following morning, at 7:00 a.m. on Monday, December 24, 1990, Mr. Shen returned to the mill to relieve Mr. White who had worked all night. Mr. White related his discovery that the tank gauges were frozen and his actions to unfreeze them. Mr. White then went home. Mr. Shen observed that the gauge on tank no. 2 showed that it had been filling. The gauge was showing half full, thus confirming successful movement of the caustic through the transfer pipe between tank no. 1 and 2. Recalling Mr. White's mention of frozen gauges, Mr. Shen applied hot water to the gauge on tank no. 2 at 8:00 a.m. The needle of the gauge sprang to full and Mr. Shen felt, with his hand, warmth on the side of tank no. 3. Both the full reading on tank no. 2's gauge and the warmth in tank no. 3 confirmed that caustic had successfully moved through the transfer pipe between no. 2 and 3, and that the filling of tank no. 3 had commenced by 8:00 a.m.

XIV

One half hour later, at 8:30 a.m. on Monday, December 24, 1990, a loud noise apprised Mr. Shen that the barge pump was drawing air. Mr. Shen promptly turned the pump

off. He adjusted certain valves to reduce the flow rate. These adjustments required the pump to be off for one half hour. At 9:00 a.m. Mr. Shen restarted the pump and completed unloading of the barge one half hour thereafter, at 9:30 a.m. on Monday, December 24, 1990. Mr. Shen concluded that the unloading had been successful.

XV

Unknown to Mr. Shen or anyone else at the time, the half hour's shutdown of the barge pump had begun a chain of events. The pump halt, in turn, halted the movement of caustic within the short transfer pipe between tanks no. 2 and 3. This transfer pipe, and the kindred one between tanks no. 1 and 2, are the only unheated intervals through which caustic travels after entering tank no. 1. The caustic crystalized in the no. 2 to 3 transfer pipe. Caustic in tank no. 2, being unable to advance, rose to a higher level in tank no. 2 and passed out an upper overflow pipe running to the mill's waste water treatment plant. This overflow was neither visible nor audible to Mr. Shen.

XVI

At the conclusion of barge unloading, Mr. Shen inspected the gauge on tank no. 3. It read "8" pounds per square inch (p.s.i.) where 15 p.s.i. would be full. That reading, if understood as it should be to mean that tank no. 3 was half full would mean that the three tanks contained approximately 1350 metric tons[2] This was consistent with unloading the barge without loss of caustic.[3]

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[2] Tank no. 1 full at 900 tons, tank no 2 full at 300 tons, and tank no. 3 half full at 150 tons equals 1350 tons

[3] The barge held 1100 tons of caustic There were 200 tons in the storage tanks when unloading begins. After unloading, the tanks should have had 1300 tons which is consistent with the gauge reading, above.

XVII

The overflow lasted approximately 30 minutes, from the time the pump was restarted at 9:00 a.m. to the completion of pumping at 9:30 a.m. In all, about 30 metric tons (10,600 gallons) of caustic were discharged from tank no. 2 to the waste water treatment plan. This is one-tenth of the capacity of tank no. 3.

XVIII

The overflow of 30 metric tons in 30 minutes would equate to a rate of one metric ton per minute. At this rate, and had the overflow not occurred, and had the gauge been unfrozen and carefully observed, the needle on the gauge of tank no. 3 would probably have moved perceptively. Because tank no. 3 had about 70 tons when pumping began, the correct gauge reading then would have been about 3.5 p.s.i. Tank no. 3, when full would register 15 p.s.i. The gauge actually stopped at 8 p.s.i. Without the overflow it probably would have stopped at 9.5 p.s.i. as the 30 tons lost would account for 1.5 marks on the gauge. Therefore, if the gauge properly reflected the actual filling of the tank, the tank no. 3 gauge would have moved about one mark per ten minutes or three marks during the last half hour of pumping.

XIX

The foregoing gauge movement would be slight. Yet, to a careful operator, the gauge was a means of detecting the overflow, as observation of the tank no. 3 gauge would have shown no movement during the overflow. That would contrast with some movement had the overflow not occurred.

XX

No similar incident has occurred at least in the previous four years, and none has occurred since. In all, the overflow was less than 3% of the amount of caustic unloaded from the barge. The overflow was not visible nor audible through a piping gap, shown not to exist.

XXI

Of the 10,600 gallons of caustic entering the wastewater treatment plant, approximately 1,500 gallons was discharged to the receiving waters. The caustic also killed off a large part of the biota employed in secondary treatment resulting in discharge of the dead biota and consequent substandard treatment of later waste water. The following exceedences of technology based effluent limitations occurred:

Total Suspended Solids	-	Limit 40,800 lbs/day
Dec. 25	-	96,200 lbs/day
Dec. 26	-	45,600 lbs/day
Biochemical Oxygen Demand	-	Limit 28,200 lbs/day
Dec. 24	-	31,700 lbs/day
Dec. 25	-	68,600 lbs/day
Dec. 26	-	30,800 lbs/day
p^H Discharge	-	Limit 5.0 - 9.0
Dec. 24		> 9.0 for 9 hours
Dec. 25		> 9.0 for 24 hours
Dec. 26		> 9.0 for 14 hours

This constitutes eight violations where each day's violation of a single limitation is a separate violation. See RCW 90.48.144.

XXII

There was no direct evidence presented by either party whether there was harm to the public health or environment.

XXIII

The ITT waste water treatment plant routinely tested for p^H at 8:00 a.m. and

4:00 p.m. on the day of the overflow, Monday, December 24, 1990. The incident occurring between 9:00 and 9:30 a.m., the elevated p^H was not discovered until 4:00 p.m. The waste water treatment plant operator reported the high p^H readings to ITT's Environmental Manager, Mr. Jerry Schaaf at 5:00 p.m. on Monday, December 24, 1990. Mr. Schaaf was at home. Mr. Schaaf ordered that acid be added to the system to counteract the caustic overflow.

XXIV

Thereafter, still on the evening of Monday, December 24, 1990, Mr. Schaaf left home and arrived at the mill. From the mill at approximately 7:00 p.m. that evening, Mr. Schaaf telephoned Mr. Donald Kjosness of respondent Department of Ecology. Mr. Schaaf reached Mr. Kjosness, who was at home, and reported the occurrence of the caustic overflow and gave a summary of the incident.

XXV

The following morning, on Tuesday, December 25, 1990, Mr Schaaf telephoned Mr. Kjosness's office and left a recorded telephone report of the overflow on the unattended answering machine at Ecology's office.

XXVI

On Wednesday, December 26, 1990, Mr. Schaaf left a further report of the incident on Ecology's answering machine. On Thursday, December 27, 1990, Mr. Schaaf telephoned Mr. Marc Crooks of Ecology and gave an oral summary of the incident to him. Mr. Crooks is Mr. Kjosness's superior at Ecology.

XXVII

On Wednesday, January 2, 1990, Mr. Schaaf filed with Ecology a written report of the overflow incident. This was in the form provided by the Superfund Amendments and Reauthorization Act (SARA).

XXVIII

After the December, 1990, events were complete, the postponed plant shutdown was made in January, 1991, when the weather warmed. At 6:00 a.m. on Saturday, January 12, 1991, the waste water treatment plant operator again found p^H problems, this time a low, or acidic, reading in contrast to the high, or alkaline, reading of December, 1990. Alkaline substances were immediately added to neutralize the system.

XXIX

The neutralization effort was less effective because of the lowered buffering capacity of the system. Diminished plant production reduced flow through the waste water treatment plant That flow was only 20% of normal due to the shutdown.

XXX

At 11:30 p.m. on Saturday, January 12, 1991, the p^H readings reached a level below the minimum provided by ITT's technology based permit limitations. The system, by regular monitoring and neutralizing, was brought back into compliance by 11:00 p.m. on Sunday, January 13, 1991. In all, the non-compliance lasted 23 1/2 hours. This was 1/2 hour on Saturday, January 12, 1991, and 23 hours on Sunday, January 13, 1991.

XXXI

There is no direct evidence presented by either party on whether there was harm to the public health or environment as a result of the January incident.

XXXII

Following the December, 1990, and January, 1991, incidents ITT, by its own initiative, added probes to its sewer lines. These probes continously monitor p^H and will set off an audible and visible alarm at the mill control center if p^H is either too high as in

December, 1990, or too low, as in January, 1991. The mill control center is staffed 24 hours per day. The probes were installed in late January, 1991.

XXXIII

On April 30, 1991, Ecology assessed an $80,000 civil penalty against ITT for the events of December, 1990, and a $20,000 civil penalty for the events of January, 1991. These were the maximum penalties allowed for the violations alleged. Together they total $100,000.

XXXIV

The violation history of ITT, Hoquiam mill, is as follows:

February 1990	$10,000	Exceeding TSS limits
November 1989	9,000	Exceeding TSS limits
August 1989	3,000	Exceeding TSS limits
April 1989	5,000	Exceeding TSS limits

None of these violations were caused by a chemical spill.

XXXV

The assumption was made by Ecology, erroneously, that: 1) approximately twice as much caustic was lost as was lost in fact and 2) that the overflow would be both visible and audible at a gap in the overflow pipe from tank no. 2 where it enters the sewer. Ecology assumed that an amount equal to one-fifth of tank no. 3 was lost when it was one-tenth. Moreover, the piping gap supposed by Ecology was shown not to exist.

XXXVI

Ecology set the maximum penalties under an internal policy of penalty escalation. ITT's request for mitigation was denied by Ecology. ITT now appeals its combined $100,000 civil penalties.

XXXVII

Any Conclusion of Law deemed to be a Finding of Fact is hereby adopted as such.

From these Findings of Fact, the Board issues these:

CONCLUSIONS OF LAW

I

In this case ITT asserts the defense of "upset." Upset is an exculpatory provision within the water pollution control law. When proven, it entirely exonerates the party charged. The burden of proving upset is on the party charged, here ITT. The burden of proving the alleged violations is on the state, here Department of Ecology.

II

The elements of the upset defense are set forth at 40 C.F.R. §122.41(n)(3). The following must be shown:

> 1) An upset occurred and that the permittee can identify the cause(s) of an upset;
> 2) The permitted facility was at the time being properly operated; and
> 3) The permittee submitted notice of the upset as required in paragraph (l)(6)(ii)(B) of this section (twenty four hour notice).
> 4) The permittee complied with any remedial measures required under paragraph (d) of this section.

III

Notice. The parties have first placed at issue the element of the upset defense dealing with notice. Respondent, ITT, urges that only 24 hour notice is required. Ecology urges that 24 hour oral notice must be followed by written notice in 5 days to make out the defense of upset. We hold that only the 24 hour notice is required for the upset defense. This is the plain meaning of the words set forth above at 40 C.F.R. §122.41(n)(3). If the language of the statute or rule is plain, free from ambiguity and devoid of uncertainty, there is no room for

construction because the legislative intention derives soley from the language of the statute. Krystad v. Lau, 65 Wn.2d 827, 844, 400 P.2d 72, 82 (1965). We are sympathic to Ecology's need for information and its assertion that a five day requirement may arise from 40 C.F.R. §122.41(l)(6)(i). Yet those requirements are independent and separate from the element of an upset defense which specifically cites - (l)(6)(ii), not - (l)(6)(i). This is buttressed by the explicit reference to 24 hour notice in that element of the upset defense.

IV

ITT met the 24 hour notice requirement, and thus has made out the notice element of the upset defense.

V

Upset. The first element of an upset defense turns of the actual existence of upset. "Upset" is defined at 40 C.F.R.. §122.41(n)(1) as:

> " . . . an exceptional incident in which there is unintentional and temporary non-compliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent cause by operational error improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance or careless or improper operation. (Emphasis added)

VI

Operational Error or Carelessness. In this case, a caustic overflow occurred out of the sight and hearing of the operator. It is not asserted by Ecology that ITT should have had, as it does now, a back up alarm system. Indeed, the evidence does not show that an alarm system has ever been required of ITT by its NDPES permit. Rather, the assertion made by Ecology is that it was operator error or carelessness to unload the barges without tracking the caustic by reading the level indicator gauge on each tank more or less continuously and with full

assurance that the gauges were not frozen. We conclude that Ecology's assertion of operator error or carelessness is correct. In doing so, however, we would observe that it is so by a thin margin. While it fell short, the care taken by the operator was complete, save monitoring a gauge. We hold that ITT has not, therefore, made out the first element of upset and that such a defense fails. The violations of effluent limits charged by Ecology have been proven against ITT.

VII

Amount of Penalty. The water pollution control act states that, with regard to civil penalties:

> . . . the penalty amount shall be set in consideration of the previous history of the violator and the severity of the violation's impact on public health and/or the environment in addition to other relevant factors." RCW 90.48.144.

VIII

Mitigation. The penalties assessed in this matter should be mitigated. The factors calling for mitigation which we deem relevant under RCW 90.48.144 are as follows:

1. Events of December, 1990:

A. The entire action of ITT which led to the violations in question was undertaken to keep the mill running under adverse weather conditons and at a time of year normally scheduled for holiday shutdown. Failure to unload the caustic barge and shutdown of the mill might have led to more dire consequences than those which actually occurred.

B. The operator error or carelessness was slight. The incident was exceptional.

C. There was prompt action by ITT to neutralize the caustic overflow by addition of acid as soon as the overflow was discovered.

D. There was prompt action by ITT to report the incident to Ecology. This notice was not only prompt but was continuous over the days following the incident. A written report was filed very shortly after the incident.

E. The overflow was not visible nor audible through a piping gap shown not to exist.

F. After the incident, but before the penalty was assessed, ITT on its own initiative installed p^H probes and alarms to solve the problem.

G. There was no direct evidence presented by either party on whether there was any harm to human health or the environment.

2. Events of January, 1991:

A. ITT discovered the problem seventeen hours before the violation occurred.

B. ITT took prompt action to neutralize the acid and constantly monitored its progress.

C. After the incident but before the penalty was assessed, ITT on its own initiative installed p^H probes and alarms to solve the problem.

D. There was no direct evidence presented by either party on whether there was any harm to human health or the environment.

E. The maximum penalty was assessed for a full day's violation for the events of Saturday, January 12, 1991, which comprised a violation of only one half hour.

XIX

ITT cites a federal statute, 33 U.S.C. §1319(g)(3) which provides that:

> " . . . a single operational upset which leads to simultaneous violations of more than one pollutant parameter shall be treated as a single violation."

We do not reach the applicability of that statute. The mitigation which we deem appropriate under RCW 90.48.144 is set out above and independently arrives at this penalty amount.

XX

Any Finding of Fact deemed to be a Conclusion of Law is hereby adopted as such.

From the foregoing, the Board issues this:

ORDER

The violations of December, 1990, and January, 1991, are each affirmed. The $80,000 civil penalty of December, 1990, is hereby abated to $30,000, with $20,000 of that suspended provided there are no water pollution violations caused by chemical spills for two years from this Order. The $10,000 of the $20,000 civil penalty of January, 1991, is hereby suspended, provided there are no water pollution violations caused by chemical spills within the next two years. The combined civil penalties of $100,000 are abated to $50,000, with $20,000 payable now and another $30,000 suspended.

DONE at Lacey, WA, this 21st day of July, 1992.

POLLUTION CONTROL HEARINGS BOARD

HAROLD S. ZIMMERMAN, Chairman

JUDITH A. BENDOR, Member

ANNETTE S. McGEE, Member

WILLIAM A. HARRISON
Administrative Appeals Judge

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